Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20054

In the Matter of	)	
IP-Enabled Services	)	WC Docket No. 04-36
	)	
Petition of SBC Communications Inc.	)	WC Docket No. 04-29
For Forbearance	)	

COMMENTS OF

CONSUMER FEDERATION OF AMERICA

CONSUMERS UNION

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SUMMARY

These comments propose a framework for evaluating Internet Protocol (IP)-enabled services that reflects the Congressional intent and policy of the 1996 Act. They make recommendations regarding public interest standards that should be applied to a specific IP-enabled service, VOIP ("voice over internet protocol).

Section II applies the definitional categories adopted by the 1996 Act to IP-enabled services (both transmission and applications). Section III addresses the appropriate regulatory and legal framework for IP-enabled services, including the question of forbearance and preemption of regulation and jurisdictional issues. Section IV proposes an analytic framework that views the communications network as a platform composed of four layers. In Section V we recommend the specific regulations that must be applied to VOIP telecommunications service and propose the implementation over the course of a year through subsequent rulemakings and proceedings that are properly noticed and afford opportunity for comment. Attached to these comments is a study, entitled *The Public Interest in Open Communications Networks* that analyzes the concept of a layered digital communications platform and the important role it has played in creating the dynamic information environment in which the Internet has thrived.

The definitions of telecommunications and information services in the Telecommunications Act of 1996 fits a four-layered platform model closely. Telecommunications services are defined by the transmission of data (physical layer) subject to network management capabilities (code layer). Information services are defined by capabilities (applications) and subject to user control (content).

The definitions adopted by Congress make it clear that the transmission of data over the telecommunications network on which IP-enabled services rely is a telecommunications service, but under the mantra of deregulation, the FCC has sought to eliminate the public interest obligations of nondiscriminatory interconnection and carriage for the nation's advanced telecommunications networks. By failing to regulate the physical layer, the commission has exposed the vibrant competition and innovation on the Internet to the threat of foreclosure. It has also made it more difficult to deregulate the other layers of the platform. The plain language of the statute has led the Ninth Circuit to that conclusion twice over the past four years.

In the 1996 Act Congress made it clear that not every transmission is a telecommunications service and not every application is an information service. The nature of a service is not defined by the technology or the protocols used to manage the network; it is defined by what the service does and how it is offered to the public. Congress rejected the idea that the use of a new technology or the use of a new switching protocol automatically renders a service an information service. In fact, it said quite the opposite.

The fact that the underlying transmission is a telecommunications service does not mean that the application riding on it cannot be a telecommunications service as well. Each of the components must be analyzed separately to determine how to define the service. The Ninth Circuit concluded that a service sold to the public could combine both a telecommunications

service for transmission and an information service. It is obvious that a service sold to the public also could combine two telecommunications services.

In a converging network lines will be difficult to draw. In the past, the Commission has set out to find indicators of the nature of the service as defined by the nature of the transmission, its management, and function.

Because Congress provided explicit direction that changes in protocols for the purposes of network or service management do not change the definition of the service, the initial attempt of the Commission to deal with these matters relied on the concept of a "net change" in the form of the transmitted message. It used the distinction between the code layer and the applications layer to conclude that a change in the protocol to manage the network does not create an information service. That a transmission begins and ends as a voice call, for example, but is managed by being divided into packets, does not make it an information service. The transmission remains a telecommunications service. Analysis of the relationship to the North American Numbering Plan is also a code level consideration. Reliance on the existing telecommunications addressing protocol is an indicator that the service remains a telecommunications service.

The Commission has examined criteria at the physical layer as well. The issue of whether a physical connection is offered to the public for a fee has played a large role in the cable modem proceeding. Little or no change in the CPE suggests little change in the service. Similarly, reliance on the public switched network to originate or terminate calls is an area of inquiry. If a transmission never traverses the public switched network, the case that this is not a telecommunications service may be strengthened. The opposite is true as well. If a service relies on the public switched network, it is more likely to be a telecommunications service.

At the applications layer, the question of functionality is central. The heart of the information service definition involves the functions or capabilities that are supplied. Delivery of voice calls in real time is a distinct function. Similarly, in the 911 proceeding, the functionality of providing real-time, two-way communications was a consideration.

At the content layer, the critical issue is the way the end-user interacts with the data. Does the end-user control the content and direction of the transmission? Is there an end-user to end-user connection? How are services marketed to and perceived by consumers (e.g., is the service marketed and does the end-user perceive the service as a substitute for a telecommunications service)? In the 911 proceeding, consumer expectations played a key role.

We conclude that VOIP services of the Vonage type are telecommunications services and the Commission should not forbear from regulation. To the extent that the Commission would like to forbear from imposing public interest obligations on specific telecommunications services in specific geographic areas, it must engage in a full and complete proceeding under Section 10 of the 1996 Act. In order to forbear, the Commission must make a series of findings: (1) enforcement of such regulations or provisions is not necessary to ensure that the charges, practices, classifications, or regulations by, for or in connection with that telecommunications carrier or telecommunications services are just and reasonable and are not unjustly or unreasonably discriminatory; (2) enforcement of such regulation or provision is not necessary for

the protection of consumers; and (3) forbearance from applying such provision or regulation is inconsistent with the public interest.

The Commission cannot forbear regulating voice over Internet protocol (VOIP) services offered by owners of advanced telecommunications network. The advanced telecommunications services provided by telecommunications carriers fail all three prongs of the forbearance test. Unregulated telecommunications service providers will charge rates and impose conditions that are unjust and unreasonably discriminatory. Consumers will be abused and the public interest will not be served.

Whether IP-enabled telecommunications services (separate from the underlying telecommunications transmission service) meet the second and third prongs of the forbearance standard is a matter for analysis. The need for consumer protection regulation arises from the nature of the service provided and the state of the marketplace that provides it (independent of the regulation of the advanced telecommunications service). Necessities tend to receive greater regulatory attention. Sustained and vigorous competition provides the best consumer protection and is the only basis for forbearance.

Presently, both the FCC and the state public utility commissions provide consumer protection through minimal regulation of various aspects of the service transaction. Federal authorities require truth in billing and prohibit slamming. Congress has mandated protection of consumer privacy. State authorities regulate the quality of service and seek to ensure that companies meet minimum financial and managerial standards. The persistence of these regulations reflects the nascent nature of competitive sale of local telephone service and continuing problems in these new markets. Consumer protection regulation reflects market conditions, not the characteristics of individual companies.

There are certain public goods that regulators might well find will not be provided, no matter how competitive the marketplace becomes. E-911 service is such a public good. Allowing optional participation in the E-911 system creates a free rider problem that can ultimately undermine the entire service. It robs the public of the protection of a ubiquitous E-911 service. We doubt that the Commission can find that forbearing from E-911 regulation is in the public interest. Access for consumers with disabilities may be a similar public good. Telecommunications service providers may not find it profitable to serve such customers, no matter how competitive the market becomes, yet, in pursuit of universal service, society demands that they be provided services that are "readily achievable."

We conclude that VOIP services are telecommunications services and should be subject to primarily, but not exclusively, Federal regulations that govern such services. The jurisdiction of state utility commissions should not be pre-empted. The goal of ensuring universal service as defined by the 1996 Act must be preserved. VOIP should be subject to at least the following public service obligations:

- Pay its fair share of network costs for calls routed through the PSTN
- Collect universal service fund contributions
- Provide E-911

- Provide disability access
- Adhere to federal and states consumer protection laws and regulations, such as those regarding privacy of customer information, truth in billing, and slamming
- Adhere to state quality of service rules.

If the Commission were to exempt VOIP from some or all public interest obligations and consumer protections that apply to telecommunications services, it will create an unfair arbitrage advantage and a race to the bottom. In short order this situation will drive down the quality of "plain old telephone service" while driving up the price for consumers who cannot afford to switch to broadband.

However, those VOIP services that must be classified as telecommunications services are classified as such, in part, because they interconnect with the public switched telephone network (PSTN) through interexchange carriers (IXCs) and incumbent local exchange carriers (ILECs) and competitive local exchange carriers (CLECs). Therefore, intercarrier compensation and universal service contribution may already be collected on the calls that they terminate on the PSTN. To the extent costs are recovered on a per line basis, VOIP providers are probably not contributing as they should. VOIP services should pay their fair share of network costs. A careful assessment of this issue must be made in further proceedings at the federal and state levels.

Further, there are significant technical questions about how VOIP can meet several of the social and public policy requirements routinely placed on telecommunications services, such as provision of E-911 services and access to the network by persons with disabilities. These services should be afforded the opportunity to develop solutions to the technical problems. The Commission should make it clear that VOIP services, which are classified as telecommunications services, will be required to meet the public interest obligations the 1996 Act imposes on such services. This will not only ensure that consumers receive the services that Congress intended, but it will also create an obligation on the part of E-911 and other authorities to take the steps necessary to support VOIP provision of the service.

I. INTRODUCTION

There is No Proposed Rule on which to Comment in this Docket

The Consumer Federation of America[1] and Consumers Union[2] respectfully submit these comments in response to the Federal Communications Commission's (FCC or the Commission) Notice of Proposed Rulemaking in the Matter of IP-Enabled Services (Notice).[3]

The fact that the Federal Communications Commission (hereafter the Commission or the FCC) has captioned the item in this proceeding as a "Notice of Proposed Rulemaking" (hereafter Notice or the IP-Enabled Order) raises a fundamental procedural issue. The definition of telecommunications and information services are not optional, they are statutory. They are not the subjects of rulemakings, particularly to the extent to which the Commission applies regulation. The only way the Commission can forbear from regulation is to properly notice and conduct a forbearance proceeding.[4]

Moreover, even if the issues raised in the Notice were the proper subjects of a rulemaking, the Notice as crafted is procedurally flawed. The document entitled "Notice of Proposed Rulemaking" bears not the slightest resemblance to a Proposed Rule. It is a rambling

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[1] The Consumer Federation of America (CFA) is the nation's largest consumer advocacy group, composed of two hundred and eighty state and local affiliates representing consumer, senior, citizen, low-income, labor, farm, public power and cooperative organizations, with more than fifty million individual members. CFA is online at www.consumerfed.org.

[2] Consumers Union is a nonprofit membership organization chartered in 1936 under the laws of the state of New York to provide consumers with information, education and counsel about goods, services, health and personal finance, and to initiate and cooperate with individual and group efforts to maintain and enhance the quality of life for consumers. Consumers Union's income is solely derived from the sale of *Consumer Reports*, its other publications and from noncommercial contributions, grants and fees. In addition to reports on Consumers Union's own product testing, *Consumer Reports* with more than 4 million paid circulation, regularly carries articles on health, product safety, marketplace economics and legislative, judicial and regulatory actions that affect consumer welfare. Consumers Union's publications carry no advertising and receive no commercial support. CU is online at www.consumersunion.org.

[3] *In the Matter of IP-Enabled Services, Notice of Proposed Rulemaking*, FCC 04-28, 19 FCC Rcd 4863 (2004) (hereafter, *Notice*).

[4] Several parties comments are captioned as comments in *Petition of SBC Communications for Forbearance,* WC Docket No. 04-29. The SBC Petition is overbroad, as is the notice of proposed rulemaking.

series of questions mixed with opinions and observations. The Commission has not proposed a rule on which to comment. This is a "Notice of Inquiry," which can build a record, if it has the specificity required and addresses the questions posed by the Telecommunications Act of 1996 (hereafter the "1996 Act") that provides the basis for proposing an actual rule. Any such proposed rule would then have to be subject to public comment and scrutiny.

OUTLINE AND RECOMMENDATION

With that caveat in mind, these comments propose a framework for evaluating IP-enabled services that reflects the Congressional intent and policy of the 1996 Act and make recommendations regarding public interest standards that should be applied to a specific IP-enabled service, VOIP ("voice over internet protocol)[5]. The comments begin by applying the definitional categories adopted by the 1996 Act to IP-enabled services (both transmission and applications). Section III addresses the appropriate regulatory and legal framework for IP-enabled services, including the question of forbearance and preemption of regulation and jurisdictional issues.

Section IV proposes an analytic framework that views the communications network as a platform composed of four layers. We show that the Commission can and should examine the nature of services by looking at their characteristics across the layers of the digital communications platform. Attached to these comments is a study prepared by Dr. Mark Cooper, Director of Research of the Consumer Federation of America, entitled *The Public Interest in Open Communications Networks*. It analyzes the concept of a layered digital communications platform and the important role it has played in creating the dynamic information environment in

[5] We are using the term consistent with the description used by the Commission in the Notice at Note 7, using the term " VOIP" to include any IP-enabled service "offering real-time, multidirectional voice functionality, including, but not limited to, services that mimic traditional telephony."

which the Internet has thrived. This framework will be used to demonstrate the close fit between the underlying technology and the definitional scheme Congress adopted in the 1996 Act. The Commission does not need to break new ground or invent new categories to deal with IP-enabled services. It simply needs to recall its own success in the Computer Inquiries,[6] read the law carefully and implement it in a manner that is faithful to the intent of Congress, which was, itself, greatly influenced by the success of the regulations implemented by the Computer Inquiries.

In Section V we recommend the specific regulations that must be applied to VOIP telecommunications service and propose the implementation over the course of a year through subsequent rulemakings and proceedings that are properly noticed and afford opportunity for comment. For example, several of the critical public policy issues that affect IP-enabled telecommunications services, such as intercarrier compensation and universal service contribution, are central to the concern about VOIP. These public policy issues are the subjects of ongoing proceedings at the Commission and the treatment of VOIP should be folded into those proceedings.[7]

Moreover, those VOIP services that must be classified as telecommunications services are classified as such, in part, because they interconnect with the public switched telephone network (PSTN) through interexchange carriers (IXCs) and incumbent local exchange carriers

[6] The definitions evolved over time as the Commission gained experience with the distinction between communications and data processing. Contrast *Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Services and Facilities,* Docket No. 16979, Final Decision and Order, 28 FCC 2d 291 (1971) and *In re* Amendment of Section 64.702 of the Commission's Rules and Regulations, *Final Decision,* 77 FCC 2d 384 (1980). (Computer II)

[7] *Intercarrier Compensation Notice of Proposed Rulemaking*, 16 FCC Rcd 9610 (2001), *Federal-State Joint Board on Universal Service, 1988 Biennial Regulatory Review – Streamline Contributor Reporting Requirements Associated with Administration of Telecommunications Relay Service, North American Numbering Plan, Local Number Portability, and Universal Service Support Mechanisms, Telecommunications Services for Individuals with Hearing and Speech Disabilities, and the Americans with Disabilities Act of 1990, Administration of the North American Number Resource Optimization, Telephone Number Portability, Truth-in-Billing Format,* CC Docket Nos. 96-45, 98-171, 90-571, 92=237, 99-200, 95-116, 98-170, Report and Order and Second Further Notice of Proposed Rulemaking, 17 FCC Rcs 24952, 24984-98 (2002).

(ILECs) and competitive local exchange carriers (CLECs). Therefore, intercarrier compensation and universal service contribution may already be collected on the calls that they terminate on the PSTN. To the extent costs are recovered on a per line basis, VOIP providers are probably not contributing as they should. VOIP services should pay their fair share of network costs. A careful assessment of this issue must be made in further proceedings at the federal and state levels.

Further, there are significant technical questions about how VOIP can meet several of the social and public policy requirements routinely placed on telecommunications services, such as provision of E-911 services and access to the network by persons with disabilities. These services should be afforded the opportunity to develop solutions to the technical problems. The Commission should make it clear that VOIP services, which are classified as telecommunications services, will be required to meet the public interest obligations the 1996 Act imposes on such services. This will not only ensure that consumers receive the services that Congress intended, but it will also create an obligation on the part of E-911 and other authorities to take the steps necessary to support VOIP provision of the service.

Similarly, consumer protection policies are vital to the development of a consumer-friendly local telecommunications market and should not be exempted or pre-empted for VOIP service. At the federal level (e.g. truth in billing and anti-slamming), and consumer protection policies at the state level (e.g. quality of service and marketing and information safeguards) that have traditionally been the province of the states should remain so and be enforced.

In summary, we conclude that VOIP services are telecommunications services and should be subject to primarily, but not exclusively, Federal regulations that govern such services. The jurisdiction of state utility commissions should not be pre-empted. The goal of ensuring universal

service as defined by the 1996 Act must be preserved. VOIP should be subject to at least the following public service obligations:

- Pay its fair share of network costs for calls routed through the PSTN
- Collect universal service fund contributions
- Provide E-911
- Provide disability access
- Adhere to federal and states consumer protection laws and regulations, such as those regarding privacy of customer information, truth in billing, and slamming
- Adhere to state quality of service rules.

If the Commission were to exempt VOIP from some or all public interest obligations and consumer protections that apply to telecommunications services, it will create an unfair arbitrage advantage. In short order this situation will drive down the quality of "plain old telephone service" while driving up the price for consumers who cannot afford to switch to broadband.

II. CATEGORIZING IP-ENABLED SERVICES UNDER THE 1996 ACT

The primary reason that the Commission has been in a quandary about how to treat services using the Internet Protocols (IP-enabled services) and many other aspects of broadband Internet policy is its consistent and persistent failure to implement the 1996 Act as written and intended by Congress. In a vain attempt to eliminate the public interest obligations of nondiscriminatory interconnection and carriage for the nation's advanced telecommunications

networks, the Commission has distorted and disregarded the clear distinction Congress drew between telecommunications services and information services.[8]

The Commission was told to regulate telecommunications services, but not information services. The Ninth Circuit Court of Appeals has twice told the Commission to subject the advanced telecommunications services utilized by high-speed Internet service providers to transmit information to the obligations of nondiscriminatory interconnection and carriage that apply to all telecommunications services.[9] But the Commission persists in pursuing the goal of "unregulating" the Internet[10] by illegally and improperly deregulating the telecommunications services on which Internet Service Providers rely to deliver services to the public.

TELECOMMUNICATIONS AND INFORMATION SERVICES

The Commission had the foresight to adopt a distinction between enhanced and basic services in the Computer Inquiries 35 years ago. Congress adopted that distinction in the 1996 Act in the form of the definitions of information and telecommunications services. The distinction between information and telecommunications services is the fundamental definitional categorization the Commission should apply in this proceeding. Indeed, this is the distinction that the Commission must make; it is not optional. Most importantly, this categorization provides the compass the Commission needs to chart a path through the morass it has created by failing to implement the clear vision adopted by Congress.

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[8] *Internet Over Cable Declaratory Ruling,* Declaratory Ruling, 17 FCC Rcd 4798 (2002); *In re Inquiry Concerning High-Speed Access to Internet Over Cable and Other Facilities,* 17 FCC Rcd 4821 (2002); Appropriate *Framework for Broadband Access to Internet Over Wireline Facilities,* CC Docket Nos. 02-33, 95-20, 98-10, Notice of Proposed Rulemaking, 17 FCC Rcd 3019 (2002), where the FCC proposes to eliminate the obligation for nondiscrimination for wireline services, as it had done for cable modem service.

[9] *AT&T v. City of Portland,* 216 F. 3d 871, 880 (9th Cir. 2000), affirmed *Brand X Services v. FCC,* 345 F. 3d 1120 (9th Cir. 2003).

[10] Jason Oxman, *The FCC and the Unregulation of the Internet,* OPP Working Paper No. 31

The Congress crafted this language carefully to ensure that consumers and service providers are protected from unjust rates and unreasonable discrimination and that the public interest is promoted in the deployment of telecommunications networks and services. The Commission must abide by the definitions Congress provided and adhere to the process it outlined for changing regulation.

As noted, the definitional scheme of the 1996 Act reflected the experience of the FCC in several decades of promoting unregulated enhanced services while ensuring open and nondiscriminatory access to basic telecommunications service. A series of interrelated definitions lie at the core of the 1996 Act.

> The term "telecommunications" means the transmission between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received.
>
> The term "telecommunications service" means the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.
>
> The term "information service" means the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operations of a telecommunications system or the management of a telecommunications service.[11]

Telecommunications services are subject to the full range of public interest obligations under the Communications Act. Information services are not.

TRANSMISSION OF IP-ENABLED SERVICES OVER ADVANCED TELECOMMUNICATIONS NETWORKS IS A TELECOMMUNICATIONS SERVICE

The definitions adopted by Congress make it clear that the transmission over the telecommunications network on which IP-enabled services rely is a telecommunications service.

[11] 47 U.S.C. s 153.

The plain language of the statute has led the Ninth Circuit to that conclusion twice over the course of the past four years.

> Among its broad reforms, the Telecommunications Act of 1996 enacted a competitive principle embodied in the dual duties of nondiscrimination and interconnection… Together, these provisions mandate a network architecture that prioritizes consumer choice, demonstrated by vigorous competition among telecommunications carriers. As applied to the Internet, Portland calls it "open access," while AT&T dysphemizes it as "forced access." Under the Communications Act, this principle of telecommunications common carriage governs cable broadband as it does other means of Internet transmission such as telephone service and DSL, "regardless of the facilities used." The Internet's protocols themselves manifest a related principle called "end-to-end": control lies at the ends of the network where the users are, leaving a simple network that is neutral with respect to the data it transmits, like any common carrier. On this role of the Internet, the codes of the legislator and the programmer agree.[12]

The Court looked carefully at the combination of two services inherent in selling Internet access to the public for a fee and concluded that the underlying transmission functionality is a telecommunications service.

> Under the statute, Internet access for most users consists of two separate services. A conventional dial-up ISP provides its subscriber access to the Internet at a "point of presence" assigned a unique Internet address, to which the subscribers connect through telephone lines. The telephone service linking the user to the ISP is classic "telecommunications"…
>
> ISPs are themselves users of telecommunications when they lease lines to transport data on their own networks and beyond on the Internet backbone. However, in relation to their subscribers, who are the "public" in terms of statutory definition of telecommunications service, they provide "information services," and therefore are not subject to regulation as telecommunications carriers.
>
> Like other ISPs, [AT&T's cable broadband service] consists of two elements: a pipeline (cable broadband instead of telephone lines), and the Internet service transmitted through that pipeline. However, unlike other ISPs, [the cable broadband provider] controls all of the transmission facilities between its subscriber and the Internet. To the extent [a cable broadband provider] is a conventional ISP, its activities are one of an information service provider. However, to the extent that [a cable operator] provides its subscribers Internet

[12] *AT&T Corp. v. City of Portland.*

> transmission over its cable broadband facility, it is providing a telecommunications service as defined in the Communications Act.[13]

The longer the Commission delays in accepting the clear intent of Congress, the greater the uncertainty it imposes on the industry and the longer it will take to sort out the other important policy decision that are legitimately before the Commission.

SOME IP-ENABLED APPLICATIONS, INCLUDING VOIP, ARE TELECOMMUNICATIONS SERVICES

The fact that the underlying transmission is a telecommunications service does not mean that the application riding on it cannot be a telecommunications service as well. Each of the components must be analyzed separately to determine how to define the service. The Ninth Circuit concluded that a service sold to the public could combine both a telecommunications service for transmission and an information service. It is obvious that a service sold to the public could also combine two telecommunications services.

In the 1996 Act, the Congress made it clear that not every transmission is a telecommunications service and not every application is an information service. The nature of a service is not defined by the technology or the protocols used to manage the network; it is defined by what the service does and how it is offered to the public. Congress rejected the idea that the use of a new technology or the use of a new switching protocol automatically renders a service an information service. In fact, it said quite the opposite.

While the Ninth Circuit Court in *Brand X* was largely content to restate its conclusion in *Portland v. AT&T*, the concurrence of Judge Thomas presented the detailed statutory analysis that had to be applied to combinations of services.

> As noted in both *City of Portland* and our opinion today, Internet access involves two separate services: an information service that provides e-mail, web browsing,

[13] *Brand X v. FCC.*

> and other means of manipulating information, and a telecommunications "pipeline" that transmits the actual data. The statue defines and regulates these two components separately, in accordance with the historic distinction between basic and enhanced services. Although this differential is more apparent when two different companies are involved, the same statutory framework applies when a single company provides the two services.[14]

As described in greater detail in Section IV below, VOIP services, such as those offered by Vonage and AT&T, are clearly a telecommunications services under the definitions in the 1996 Act and thus subject to Title II regulation. As telecommunications services, these IP-enabled applications are subject to certain regulations, including public interest obligations, unless the Commission specifically forbears from applying all or some of the applicable regulations.

Consumers Union and CFA believe the Commission should not forbear from regulating those VOIP services that are substitutes for and in competition with traditional telephone service. From the consumer perspective, any service that is marketed as a voice telephone service, interconnects with the PSTN and uses phone numbers under the NANP, is a telecommunications service and should also bring with it the same assurances as to quality of service and consumer protection as traditional telephone service. Federal consumer protection policies, including those regarding truth in billing, privacy and "slamming" are no less applicable to VOIP simply because it is transmitted via an Internet protocol. Similarly, consumer protection policies at the state level (e.g. quality of service and marketing and information safeguards) that have traditionally been the province of the states should not be pre-empted.

If and when the market for local voice telephone service reaches a level of competition that the unique consumer protections attached to this vital service are no longer necessary, then some or all such services may be exempted from unique consumer protection, only so as long as

[14] *Brand X. v. FCC,* Judge Thomas concurrence.

federal and state consumer protection laws that apply to non-utility services have been extended to telecommunications services. Public policy should not countenance regulatory gaps that advantage some companies, but not others (by exempting some providers of a service, but not others). Nor should public policy countenance regulatory gaps that disadvantage consumers (by removing utility-based regulation where non-utility-based regulation is not activated).

III. LEGAL AND REGULATORY FRAMEWORK UNDER THE 1996 ACT

The Notice contemplates removing regulation of IP-enable services either through forbearance from federal regulation[15] or pre-emption of state regulation[16] or both. The Commission should do neither. As described throughout these comments, there are overriding public policy considerations with regard to IP-enabled services, including VOIP. The Commission can continue to encourage innovation in IP-enabled telecommunications services without the extreme steps of forbearance or pre-emption, which will open the door to abuses that will harm consumers, and – their trust in new competitive markets. Furthermore, as our analysis shows, forbearance cannot be justified and pre-emption violates the explicit language and intent of the 1996Act.

FORBEARING REQUIRES A RIGOROUS ANALYSIS

To the extent that the Commission would like to forbear from imposing public interest obligations on specific telecommunications services in specific geographic areas, it must engage in a full and complete proceeding under Section 10 of the 1996 Act, which, to date, it has not. If the Commission held such a proceeding, we are convinced that the Commission will find that the

[15] Notice, ¶ 45.
[16] *Id.* ¶Section. IV.

public interest still requires that telecommunications service providers be subject to these regulations. The petitions for forbearance before the Commission are overbroad and should be rejected by the Commission.

By law, in order to forbear the Commission must make a series of findings about specific products in specific markets:

> The Commission shall forbear from applying any regulation or any provision of this Act to a telecommunications carrier or telecommunications service, or class of telecommunications carriers or telecommunications services, in any or some of its or their geographic markets, if the Commission determines that –
>
> (1) enforcement of such regulations or provision is not necessary to ensure that the charges, practices, classifications, or regulations by, for or in connection with that telecommunications carrier or telecommunications services are just and reasonable and are not unjustly or unreasonably discriminatory.
>
> (2) enforcement of such regulation or provision is not necessary for the protection of consumers; and
>
> (3) forbearance from applying such provision or regulation is not inconsistent with the public interest.[17]

THE COMMISSION CANNOT FORBEAR REGULATING THE TRANSMISSION SERVICES OFFERED BY ADVANCED TELECOMMUNICATION SERVICE PROVIDERS

The Commission cannot forbear regulating IP- enabled services offered by owners of advanced telecommunications network, who have been (or might soon be) released from the obligation to provide nondiscriminatory access to the underlying telecommunications networks. In our view, the advanced telecommunications services provided by telecommunications carriers fail all three prongs of the forbearance test. Unregulated telecommunications service providers will charge rates and impose conditions that are unjust and unreasonably discriminatory. Consumers will be abused and the public interest will not be served.

[17] 47 U.S.C. S. 11.

The case against forbearance can easily be made based on the feebleness and unevenness of competition in telecommunications facilities. The demonstrated willingness of network owners to foreclose their networks or discriminate against unaffiliated service providers and their imposition of restrictions on consumer use of the advanced telecommunications networks makes the case for continuing the public interest obligations. These are discussed in detail in the attached study.[18]

The failure of voluntary negotiations to solve the impasse in the Triennial Review Order and the effort by the dominant incumbent local exchange carriers (ILECs) to impose anticompetitive and discriminatory conditions on their interconnection agreements with competitive local exchange carriers (CLECs) underscore the critical need for continued oversight over the terms and conditions of interconnection and carriage at the physical layer of the telecommunications network. The strong-arm tactics by the ILECs provide a very stark reminder that the public interest is not served when dominant firms in an interconnected network can dictate the success or failure of competitors, unaffiliated service providers and specific services by selectively offering favorable terms to unaffiliated entities that agree not to compete too vigorously with incumbents.

The potential harm that the abuse of ILEC market power poses in relation to interconnection for traditional voice grade service is compounded for advanced telecommunications services, where they would exercise control over innovation by controlling the functionality of the network to dictate which innovative services flourish and which wither and die. In the voice context, price is the primary concern; in the information service context, while price remains a concern, innovation is even more important.

[18] *Open Communications,* at 63-7.

The track record of failure in negotiated agreements for nondiscriminatory access to the advanced telecommunications network operated by the cable companies is worse.[19] The 2004 report on Competition in the Multichannel Video market underscores just how dismal the prospects for voluntary negotiations are. The Commission notes that "some … Other cable operators offer consumers a choice among multiple ISPs."[20] In fact, the use of the words "some" and "other" grossly overstates the extent of voluntarily negotiated carriage. The only voluntary carriage agreements the Commission cites apply to two cable systems operated by Comcast, one in Boston and the other in Seattle.[21] These have allowed six unaffiliated ISPs to have commercial access to their subscribers. Given the size of the industry, if private negotiations were working reasonably, we would expect to see hundreds, if not thousands, of deals, not a handful, all of which were announced during a merger review. This must be considered an utter failure of private negotiations.

The lesson that must be learned from the outrageous behavior of the ILECs, even when under close scrutiny, and the continuing failure of cable operators to offer reasonable terms for access to their advanced telecommunications networks is that owners of last mile facilities will not voluntarily agree to interconnection agreements that are just and reasonable. With two wires dominating the last mile distribution and few alternatives available to most residential consumers, competition is inadequate to force the owners of distribution facilities to bargain fairly with alternative suppliers of voice and data services. They maximize their profits by leveraging their control over and preventing unaffiliated service providers from competing over the last mile facilities.

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[19] *Open Communications,* at 63-71.

[20] *In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming,* MB Docket No. 03-172, at para 54.

[21] Christopher Stern, *Cable's Closed Connections*, THE WASHINGTON POST, Oct. 11, 2003, at E1 and E2.

The closure of the advanced telecommunications network to unaffiliated service providers and the obstacles that last mile facility owners have thrown in the path of competitors have had a devastating effect on competition and innovation in advanced services.[22] The failure of the Commission to follow the law and require cable operators to provide nondiscriminatory access to their advanced telecommunications networks and the inadequate oversight over access to the advanced telecommunications services of the ILECs has undermined the incentive for innovation in broadband services. The ranks of the ISPs and CLECs have been devastated; innovation market, has stalled in the broadband product space.

In short, there is every reason to believe that regulation is necessary to prevent unjust and unreasonably discriminatory rates, terms and conditions and to protect consumers. The balance that Congress struck between the private interest of network owners and the public interest obligations under which they are required to operate by the Communications Act of 1934 and reaffirmed in the Telecommunications Act of 1996, has not been "upset" by the growth of competition. On the contrary, the vibrant competition and innovation on the Internet that Congress sought to preserve was made possible by the obligation to provide nondiscriminatory interconnection and carriage. That competition is severely threatened by the failure of the Commission to ensure nondiscriminatory treatment of service providers and consumers for the advance telecommunications networks on which the Internet increasingly depends.

An even stronger case can be made that the third prong of the test – public interest – provides an independent basis for regulation of telecommunications services, as discussed in the attached study.[23] The widely recognized critical role that the Commission's policy of requiring open, nondiscriminatory access to the telecommunications networks played in creating the

[22] *Open Communications,* at 63-71.
[23] *Open Communications,* at 13-44.

conditions for the Internet, compels the Commission to take a broad view of the public interest. The Commission must recognize the immense positive externalities of a ubiquitous, open, telecommunications network. The network effects at the core of a networked, information economy vastly exceed the sum of the private interests of the owners of telecommunications facilities. It is such network effects that the owners of telecommunications facilities are least able to see; but the Commission foresaw in the Computer Inquiries. The mere threat or possibility of discrimination, not to mention the demonstrated pattern of anticompetitive and anti-consumer behavior by physical layer telecommunications service providers, poisons the environment for innovation.

THE COMMISSION SHOULD NOT FORBEAR FROM REGULATING VOIP SERVICES

The Commission asks for comments on (1) what regulations, if any, would apply to each class of VOIP services, given the legal classification urged for that class; (2) whether, for services classified as "telecommunications services," it should use its forbearance authority to remove a particular obligation or entitlement, and (3) whether, for services classified as "information services," it should exercise its ancillary jurisdiction to impose a particular obligation or entitlement.[24]

As described throughout these comments, it is crucial for the Commission to appropriately classify VOIP services as telecommunications services that are subject to Title II of the 1996 Act. Once properly classified, the question is whether the service meets the three-prong forbearance test under law.

Non-facilities based IP-Enabled service providers lack market power at the physical layer and therefore the ability to discriminate. They are unlikely to be able to discriminate at the code

[24] Notice at ¶74.

layer as well. The Commission should, however, not forbear from regulating to the extent that telecommunications service providers should not be allowed to withhold functionality or impair competing services by refusing to interoperate with other service providers. With that caveat, non-facilities based VOIP providers would meet the first prong of the forbearance test.

It is clear that the market for voice service has not developed to the point where the Commission can conclude that VOIP services and non-facilities based IP-enabled telecommunications services meet the second prong of the test. It is doubtful that the third prong will be met with respect to public interest goals such as E-911 and access for consumers with disabilities without regulation that oblige companies to provide such service.

In theory, sustained and vigorous competition provides the best consumer protection, but that is not the current state of the telecommunications market, especially for residential consumers. Problems such as misleading billing and slamming have been addressed by the Commission even in the face of claims of nascent competitive market conditions. The Commission cannot forbear providing consumer protection through regulation by simply assuming or hoping that VOIP will magically transform the telecommunications market place into a competitive, consumer-friendly environment. Nor should it assume that consumer protections are anathema to encouraging innovation or developing markets. It must have a clear record on which to reach that conclusion. Forbearing regulation on a service that is a direct substitute for regulated services creates an unlevel playing field and triggers a race to the bottom.

There are certain public goods that the Commission might well find will not ever be provided via the market, no matter how competitive the marketplace becomes. E-911 service is such a public good. Allowing optional participation creates a free rider problem that can ultimately undermine the entire service. It robs the public of the protection of a ubiquitous E-

911 service. We doubt that the Commission can find that forbearing from E-911 regulation is in the public interest. Access for consumer with disabilities is a similar public good. Telecommunications service providers may not find it profitable to serve such customers, no matter how competitive the market becomes, yet society demands that they be provided services that are "readily achievable."

There is a good reason that Congress demanded a careful and detailed analysis of the status of telecommunications services before the Commission forbears from regulation. It is a vital service that affects society in many important ways.

STATE REGULATION SHOULD NOT BE PRE-EMPTED

Consumers who are experiencing problems with their telecommunications service—whether indecipherable bills or outright fraud—look close to home first for assistance. State legislatures and utility commissions often lead the way in identifying and correcting market failures in telecommunications service. The market for local telephone service is still new, and competitive forces have not demonstrated the ability to discipline abusive sales and marketing practices. No carrier has made an effort to distinguish itself in terms of customer service. More and more consumers see service quality falling off the standards set under the monopoly era. Because VOIP services are carried over the Internet provides absolutely no justification for tying the state hands on consumer protection, fraud and service quality rules.

States have shown they are perfectly capable of implementing procompetitive consumer protection regulation.[25] The recent ruling in New York, for example, did not impose economic

[25] 47 U.S.C. s 253 explicitly preserves authority for "the ability of a state to impose, on a competitive neutral basis and consistent with section 254, requirements necessary to preserve and advance universal service, protect the public safety and welfare, ensure the continued quality of telecommunications services, and safeguard the rights of consumers."

regulation on VOIP services.[26] It recognized the need to deal with technical limitations, but established the principle that Vonage must meet public interest obligations such as providing full 911 service.

At the same time, the 1996 Act sharply restricts the Federal authority to preempt state regulation. It is hard to imagine that the Commission could justify forbearing from consumer protection regulation at the federal level, we are doubly convinced that it cannot make the case for preempting consumer protection at the state level. It should enforce its own consumer protection regulations and not preempt the states from their traditional and necessary role with regard to consumer protection and service quality in the competitive telecommunications market.

IV. The Layered Approach of the Computer Inquiries Embraced by the 1996 Act

THE LAYERED APPROACH DEFINED

It is truly ironic to read in the IP-enabled order that "in recent years, several observers have urged reliance on a 'layered' model to address VOIP and other areas of regulatory concern."[27] In fact, as is widely recognized outside of the Commission, that by adopting a layered approach over three decades ago the FCC created one of the key building blocks on which the Internet rests – nondiscriminatory access to interconnection and carriage on the telecommunications network. As described in Exhibit 1, it is useful to think of the current

[26] *Complaint of Frontier Telephone of Rochester, Inc. Against Vonage Holdings Corporation Concerning Provision of Local Exchange and InterExchange Telephone Service in New York State in Violation of he Public Service Law,* NYPSC Case 03-C-1285, Order Establishing Balanced Regulatory Framework for Vonage Holdings Corporation (May 21, 2004)

[27] Notice, at para 37.

communications platform as composed of four layers:[28] the physical layer, the code (or logic) layer, the applications layer, and the content layer.

The physical layer is composed of three components or elements. It has (1) a transmission medium (e.g. wires or spectrum) that links (2) communications equipment in the network with (3) appliance or communications and display devices at the consumer premises. Direct communications between appliances is also an increasingly feasible activity.

The code layer involves the protocols, standards, and interfaces with which communications equipment and display devices interconnect, interoperate, and communicate. Protocols interpret the signals. Operating systems allocate and coordinate the resources of the components of the platform. The operating systems and communications protocols can be resident in communications equipment and devices or network equipment or both.

Applications constitute the third layer. Applications are programs that execute a sequence of steps to solve a problem or perform a task for the user (like e-mail or file-sharing).

The content layer is made up of the specific task or problem solved in a given execution of an application. The end-user or a service provider can provide content.

This is a platform because there are strong complementarities between the layers and each layer sustains broad economic activity in the layer above it. "A platform is a common arrangement of components and activities, usually unified by a set of technical standards and procedural norms around which users organize their activities. Platforms have a known interface with respect to particular technologies and are usually 'open' in some sense."[29] The digital communications platform is an important platform because of the special role that

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[28] Lawrence Lessig, FUTURE OF IDEAS (2002) at 23 notes that Tim Berners-Lee, WEAVING THE WEB: THE ORIGINAL DESIGN AND ULTIMATE DESTINY OF THE WORLD WIDE WEB BY ITS INVENTOR (1999), at 129-30, identified four layers: transmission, computer, software and content.

[29] Shane Greenstein, *The Evolving Structure of the Internet Market*, in UNDERSTANDING THE DIGITAL ECONOMY (Erik Brynjolfsson and Brian Kahin, eds., 2000), at 155.

communications and information play in the 21st century economy. Moreover, public policy plays an important role because platforms "are typically associated with substantial externalities whose value is difficult to capture."[30]

THE DEFINITIONAL APPROACH OF THE 1996 ACT AS A LAYERED APPROACH

Exhibit 2 shows that the series of interrelated definitions in the 1996 Act fits the four-layered platform perfectly. This should not be surprising since the language of the 1996 Act adopted the definitional framework that the FCC had articulated over a period of two decades based on real world experience in the digital environment of the Computer Inquiries. Exhibit 3 fits the forbearance test into this layered approach.

It is also noteworthy that the first prong of the forbearance test uses terms from the common carrier language of sections 201 and 202 of the Communications Act that seem to target the physical and code layers of the platform (see Exhibit 3). The second prong deals with consumer protection that have typically involved behavior at the higher layers of the platform – e.g. whether or not service work as claimed, information provided to the public is provided and accurate, etc.

As the attached study shows, the classification of services by the functions they provide and how they are offered to the public is a longstanding principle of American law and Anglo-Saxon jurisprudence.[31] The obligation to provide nondiscriminatory access to the means of communications and commerce stretch back to the very beginning of capitalism under English common law principles that were brought to this country by its founders.

Characteristics of Services that Indicate How They Should be Categorized

[30] Id., at 155.
[31] *Open Communications,* 23-28.

Each party seeking to convince the Commission that it must define a service one way or the other invokes a single indicator that is claimed to be dispositive. In a converging network, however, such lines will be difficult to draw and in the past, the Commission has set out to find indicators of the nature of the service defined by the nature of the transmission, its management and function.[32] That analysis applies here.

As described in Exhibit 4, the Commission has found that traditional voice service provisioned in new ways is a telecommunications service under the statute, precisely because the language of the statute allows for careful analysis of the functions and the layers of the platform.

In part the Commission gets away with its simple-minded and single-minded miscategorization of the transmission service offered to the public on the advanced telecommunications networks because there is no baseline against which to compare the effects of that error. Consumers are overcharged and denied choice, but they do not feel the abuse as intensely because they have never had these services in a competitive, consumer friendly environment. (They do not know what they are missing.) The Commission does not have such a luxury in voice services and has been forced to be much more refined in its treatment of the dial-up telecommunications network. Here misdefinition would make the anticompetitive and anti-consumer effects immediately apparent.

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[32] *Federal-State Joint Board on Universal Service*, CC Docket 96-45, Report to Congress, 13 FCC Rcd 11501 (1998) (hereafter, *Stevens Report) ,* the *AT&T IP-Order,* and the *Pulver.com Order,* see *Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems, Amendment of Parts 2 and 25 to Implement the Global Mobile Personal Communications Satellite (GMPCS) Memorandum of Understanding and Arrangements: Petition of the National Telecommunications and Information Administration to Amen Part 25 of the Commission's Rules to Establish Emissions Limits for Mobile and Portable Earth Stations Operating in the 1610-1660 5 MHz Band, Docket Nos. CC No. 94-102, IB No. 99-67, Report and Order and Second Further Notice of Proposed Rulemaking,* FCC 03-290 (Dec. 1, 2003). *Non-Accounting Safeguards of Section 271 and 272 of the Communications Act of 1934, as Amended,* Order on Reconsideration, CC Rcd 2297 (1997) and *Independent Data Communications Manufacturers Assoc. Inc.,* Memorandum Opinion and Order, Rcd 13717, 13718 (1995).

Since IP-enabled services involve analysis of the use of protocols most intensely, we might start at the code layer. Here Congress provided explicit direction that changes in protocols for the purposes of network or service management does not change the definition of the service. Thus, the initial attempt of the Commission to deal with these matters in the Stevens Report relied on the concept of a "net change" in the form of the transmitted message.[33] It used the distinction between the code layer and the applications layer to conclude that a change in the protocol to manage the network does not create an information service. That a transmission begins and ends as a voice call, but is managed by being divided into packets, does not make it an information service.

Analysis of the relationship to the North American Numbering Plan (NANP) is also a code level consideration. Reliance on the existing telecommunications addressing protocol is an indicator that the service remains a telecommunications service and no change has taken place.

The Commission has examined criteria at the physical layer as well. The issue of whether a physical connection is offered to the public for fee has played a large role in the cable modem proceeding. The Commission has claimed that a "stand-alone" offer of the connection is what Congress meant when it used the words "for a fee" in the statute. The Ninth Circuit has rejected the FCC's illegal attempt to add words to the 1996 Act.

Examination of the customer premise equipment (CPE) used is a reasonable undertaking. Little or no change in the CPE suggests little change in the service.

Similarly, reliance on the public switched network suggests that the nature of the service has not changed. If a transmission never traverses the public switched network, the case that this is not a telecommunications service may be strengthened. The opposite is true as well. The

[33] *Stevens Report, at p*ara 87, 88, 89.

question of whether the service actually traverses the Internet (as opposed to merely using Internet protocols) can also play a role. AT&T called its service an IP-like service in recognition that the transmission never actually traversed the Internet but was entirely under its direct management and control on a proprietary backbone, when it was not on the public switched network.[34] This suggests it is just a new way of managing an existing telecommunications service.

At the applications layer, the question of functionality is central. The heart of the information service definition involves the functions or capabilities that are supplied. Delivery of voice calls in real time is a distinct function. Similarly, in the 911 proceeding, the functionality of providing real-time, two-way communications was a consideration.

At the content layer, the critical issue is the way the end-user interacts with the data. Does the end-user control the content and direction of the transmission? Is there an end-user to end-user connection? How are services marketed to and perceived by consumers (e.g. is the service marketed and does the end-user perceive the service as a substitute for a telecommunications service)? In the 911 proceeding, consumer expectations played a key role.

These are all good questions and considerations. The answers will vary depending on the specific services being analyzed. Exhibit 5 shows how the Commission has disposed of these issues in the two recent orders dealing with IP-enabled services.

By this definitional approach, the Commission got the answers right. AT&T's service is clearly a telecommunications service; for Pulver the preponderance of the evidence points in the

[34] *Petition for Declaratory Ruling That AT&T's Phone-to-Phone IP Telephony Services are Exempt from Access Charges,* WC Docket No. 02-361 (2004), Order 19 FCC Rcd 7457 (2004).

opposite direction.[35] All of the critical physical layer and code layer indicia point to AT&T's offering as a telecommunication service, while they do the opposite for Pulver.

A LAYERED ANALYSIS SHOWS THAT IP-ENABLED SERVICES OF THE VONAGE-TYPE ARE TELECOMMUNICATIONS SERVICES

The effort by VOIP service providers to define all IP-enabled services as information services must be rejected.[36] The criteria on which a blanket definition rests contradict the intent of the statute. As Exhibit 6 shows, Vonage type services appear to be much more like AT&T's offering, which was categorized as a telecommunications service, than the Pulver offering, which was categorized as an information service.

The use of Internet protocols to manage a service that originates and terminates as a voice call and the use of different facilities to transmit those calls do not negate the fact that it is a telecommunications service. The fact that information services might be offered alongside or in combination with telecommunications services does not negate the fact that a telecommunications service is being offered to the public for a fee. Offering voice mail service (an information service that stores voice messages using a telecommunications service) does not change the classification of the underlying service. A service that allows voice mail to be transformed to e-mail does not change the categorization of the underlying service. The separate voice mail/e-mail conversion service would be an information service.

The fact that these service providers own no facilities is not dispositive as a matter of law and only underscores the public policy concerns in this proceeding.[37] One of the fundamental

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[35] *Petition for Declaratory Ruling that Pulver.com's Free World Dialup Is Neither Telecommunications nor a Telecommunications Service,* WC Docket No. 03-45, Memorandum Opinion and Order, 19 FCC Rcs 3307 (2004).

[36] *In the Matter of Vonage Holdings Corporation Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission,* WC Docket No. 03-211 (September 22, 2003).

[37] "Comments of the Voice on the Net (Von) Coalitions," *In the Matter of IP-enabled Services,* WC Docket No. 04-36, May 28. 2004, at 3, arguing "Because of the openness of the Internet, service providers do not need to

issues in this proceeding is the care and maintenance of the nation's telecommunications infrastructure.

Insisting that VOIP must not be regulated because it is revolutionary, as several commenters claim,[38] and simultaneously declaring the VOIP need not be regulated because its impact has been diminimus simply ducks the fundamental question.[39]

v. Implementation of Public Interest Obligations on VOIP Service

While the fact that VOIP has had little impact to date should not be used to miscategorize the service, it does afford the opportunity to take the time to carefully consider the imposition of public interest obligations, particularly those that affect the collection of revenues. Exhibit 7 identifies the various public policy issues and how they should be handled at the Federal and state levels.

REGULATION OF FEES AND PAYMENTS FOR USE OF THE NETWORK FACILITIES

The Commission has articulated the correct concept for the collection of fees for services and social programs. All service providers should pay for the use of the network in an equitable manner. What is unclear at present is whether and the extent to which VOIP service providers, such as those similar to Vonage, already pay today. Reliance on the public switched network in

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own any infrastructure to offer services. This drastically reduces barriers to entry and increases competition… Moreover, unlike the PSTN, where service providers must either build their own or rely on the incumbent's infrastructure, the Internet allows new competitors to swiftly emerge because they do not need to own or construct any infrastructure." These sentence completely confuse the code layer (Internet) and the physical layer (infrastructure). Internet service providers did not need infrastructure because it exists and was open. The Von Coalition seems to believe that infrastructure will continue to magically appear if they do not help to pay for it and that it will remain open, if public policy does not demand that it does.

[38] "Comments of the Voice on the Net (VON) Coalition," *In the Matter of IP-Enabled Services,* Federal Communications Commission, WC Docket No. 04-36, May 28, 2004, at 6. "Comments ofVonage Holdings Corp.," *In the Matter of IP-Enabled Services,* Federal Communications Commission, WC Docket No. 04-36, May 28, 2004, at 4.

[39] VON Comments, at 15; Vonage Comments at 35.

the case of Vonage-type services results in payment to established IXCs, ILECs and CLECs. To the extent fees are collected on a per minute or revenue basis, the VOIP provider may already be paying. To the extent that contribution for public policy programs is collected on a per line basis, VOIP providers may not be contributing and they should. These questions merit further proceedings at the Federal and state levels.

At the Federal level there are ongoing proceedings to reform compensation mechanisms. Collection of revenues from VOIP providers should be rolled into those proceedings. As was the case with cellular service, the nontraditional provisioning of VOIP does provide new challenges to assessing intercarrier compensation and universal service fees. To the extent that there are technology differences that make it difficult to calculate precisely the equitable payments, it may be appropriate for the Commission to consider using a safe harbor, as it did with cellular carriers, until the proceeding is concluded.

We suggest that properly classifying the underlying transmission services as telecommunications services would lay the foundation for reform of the compensation and contribution mechanisms. The Commission has been moving toward a connection based approach and will find it difficult to implement such an approach if a substantial number of connections are excused from bearing a fair share of the economic and social costs of the public switched network because they have been incorrectly classified as information services.

However, under all circumstances, these proceedings must reflect the fact that the traditional goal of universal service that was reaffirmed by the 1996 Act is to ensure "quality services should be available at just, reasonable, and affordable rates."[40] It should ensure that "Consumers in all regions of the Nation, including low-income consumers and those in rural,

[40] 47 U.S.C. S 254.

insular, and high cost area should have access to telecommunications and information services… that are reasonably comparable to… at rates that are reasonably comparable to… similar services in urban areas."[41] Moreover, as the Commission confronts the expanding array of services provided over the telecommunications network, it must not forget the explicit charge in the 1996 Act "to ensure that services included in the definition of universal service bear no more than a reasonable share of joint and common costs of facilities used to provide those services."[42] These proceedings should also reflect the fact, as demonstrated in the intensive cost proceedings conducted since the passage of the 1996 Act that the costs of local service have been overstated in the past and are declining in the present.

CONSUMER PROTECTION

Both the FCC and the state public utility commissions provide consumer protection through minimal regulation of various aspects of the transaction. Federal authorities require truth in billing and prohibit slamming. State authorities regulate the quality of service and seek to ensure that companies meet minimum financial and managerial standards. The persistence of these regulations reflects the nascent nature of competitive sale of local telephone service and continuing problems in these new markets. The thousands of complaints and problems that led to the adoption and continuation of these regulations undermine the claim that the market will take care of such abuses. Consumer protection regulation reflects market conditions, not the characteristics of individual companies.

Consumer protection policies are vital to the development of a consumer-friendly local telecommunications market and should not be exempted or pre-empted for VOIP services. Nor

[41] *Id.*
[42] *Id.*

does the Commission have any reason to believe that the emergence of another competitive option for a small subset of consumers (those with broadband connections) suddenly creates a market Nirvana for customers of telecommunications service. As described throughout these comments, opening local telephone markets to competition has resulted in declining service quality and market conditions, rather than improvement. The race to the bottom has already begun, with dominant ILECs –who still control 90 percent of the residential market—demanding that they be excused from consumer protection regulations if VOIP providers also are.

SOCIAL REGULATION

As suggested in the discussion of the broad public interest obligation prong of the forbearance provision, the social policies of public safety, universal service and service to consumers with disabilities, should be enforced. To the extent that there are technical barriers to doing so, service providers should be given a reasonable period of time to comply. Officials and private parties responsible for overseeing and implementing these policies should be required to work with IP-enabled service providers to meet their obligations.

Exhibit 1: Layers of the Digital Communications Platform

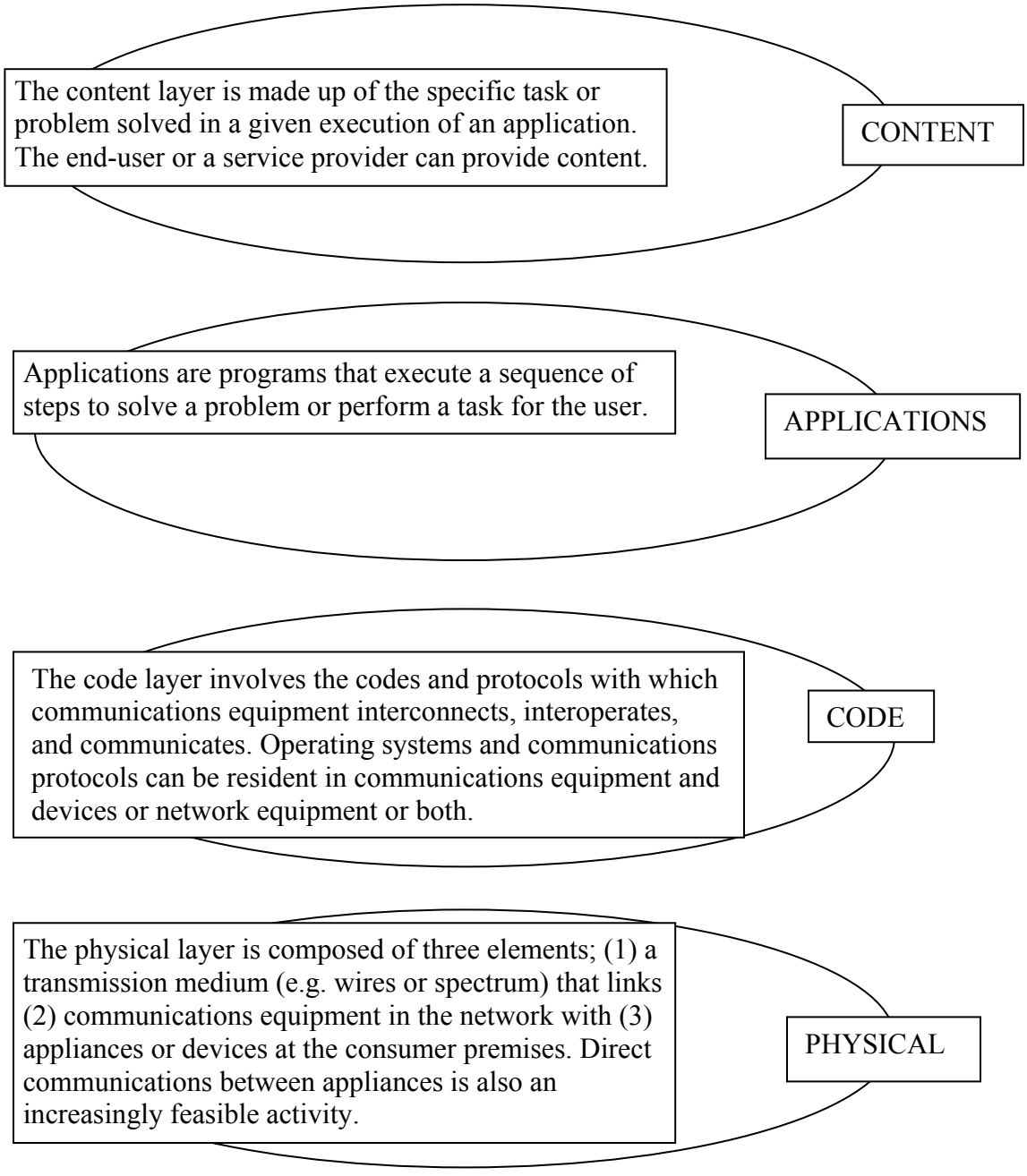

Exhibit 2: Layers of the Digital Communications Platform Compared to the Definitions in the Telecommunications Act of 1996

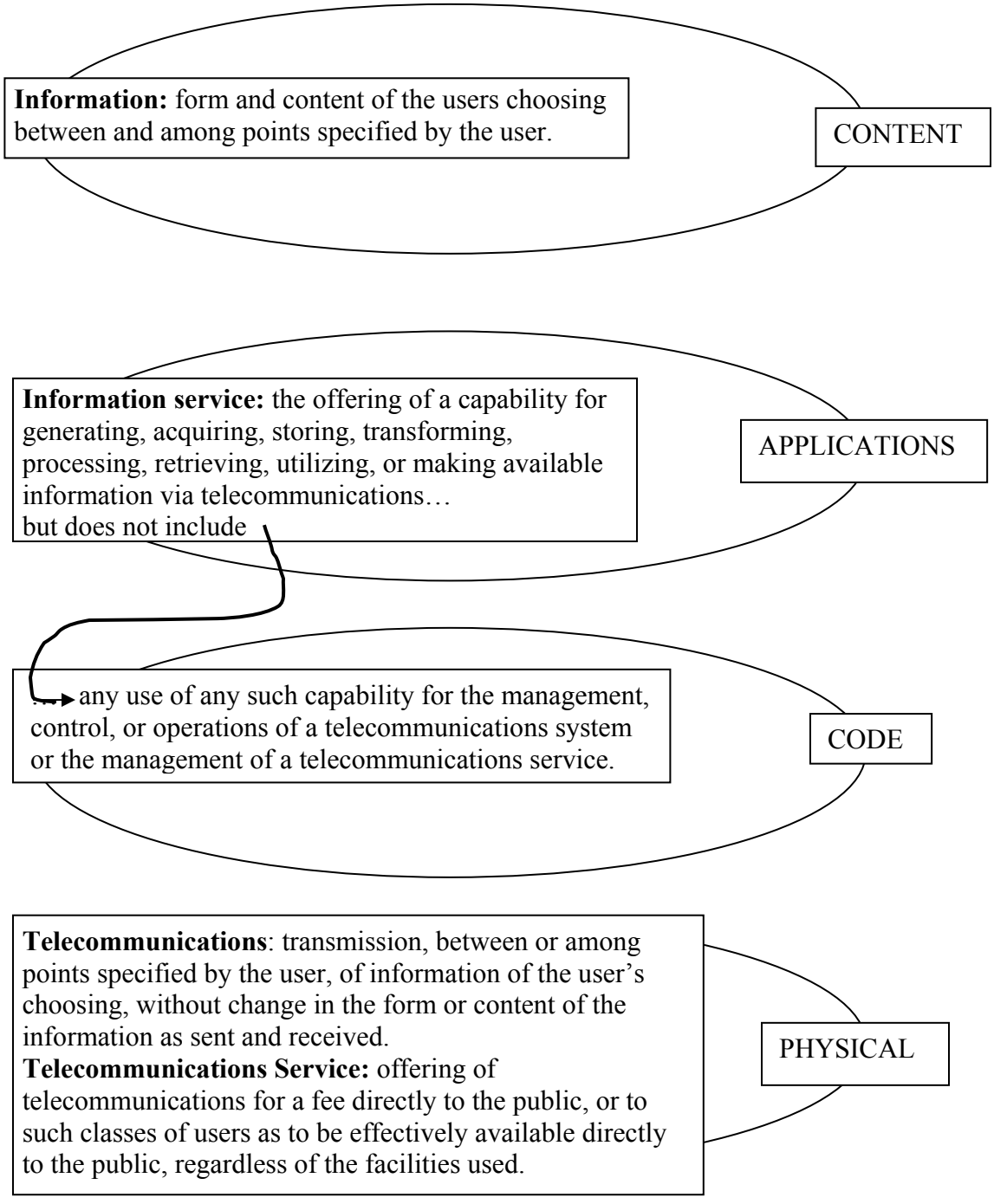

Exhibit 3: Indicia of Distinction between Telecommunications & Information Service Across Layers of the Digital Communications Platform

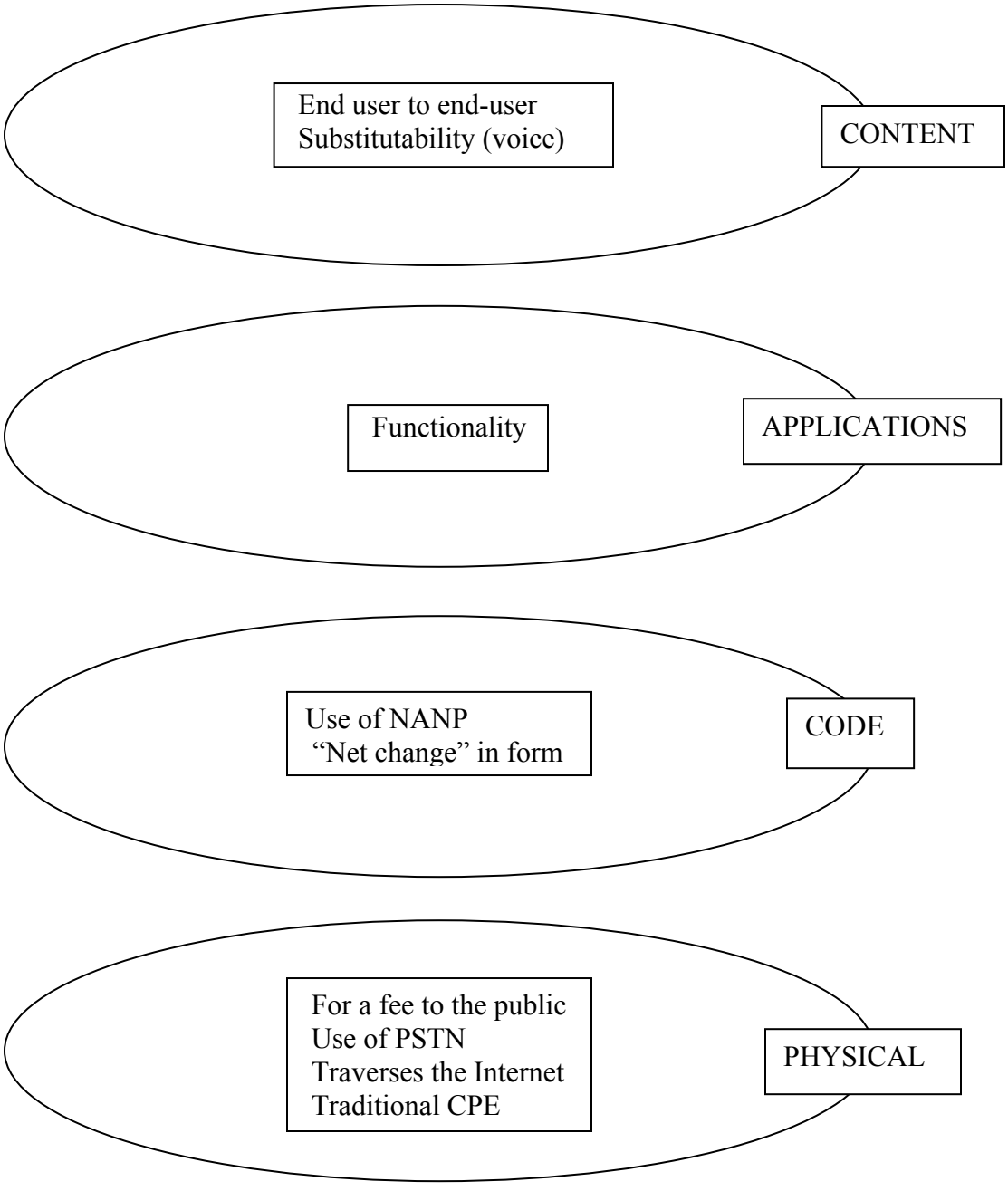

Exhibit 4: Forbearance Determinations in Relation to the Layers of the Digital Communications Platform

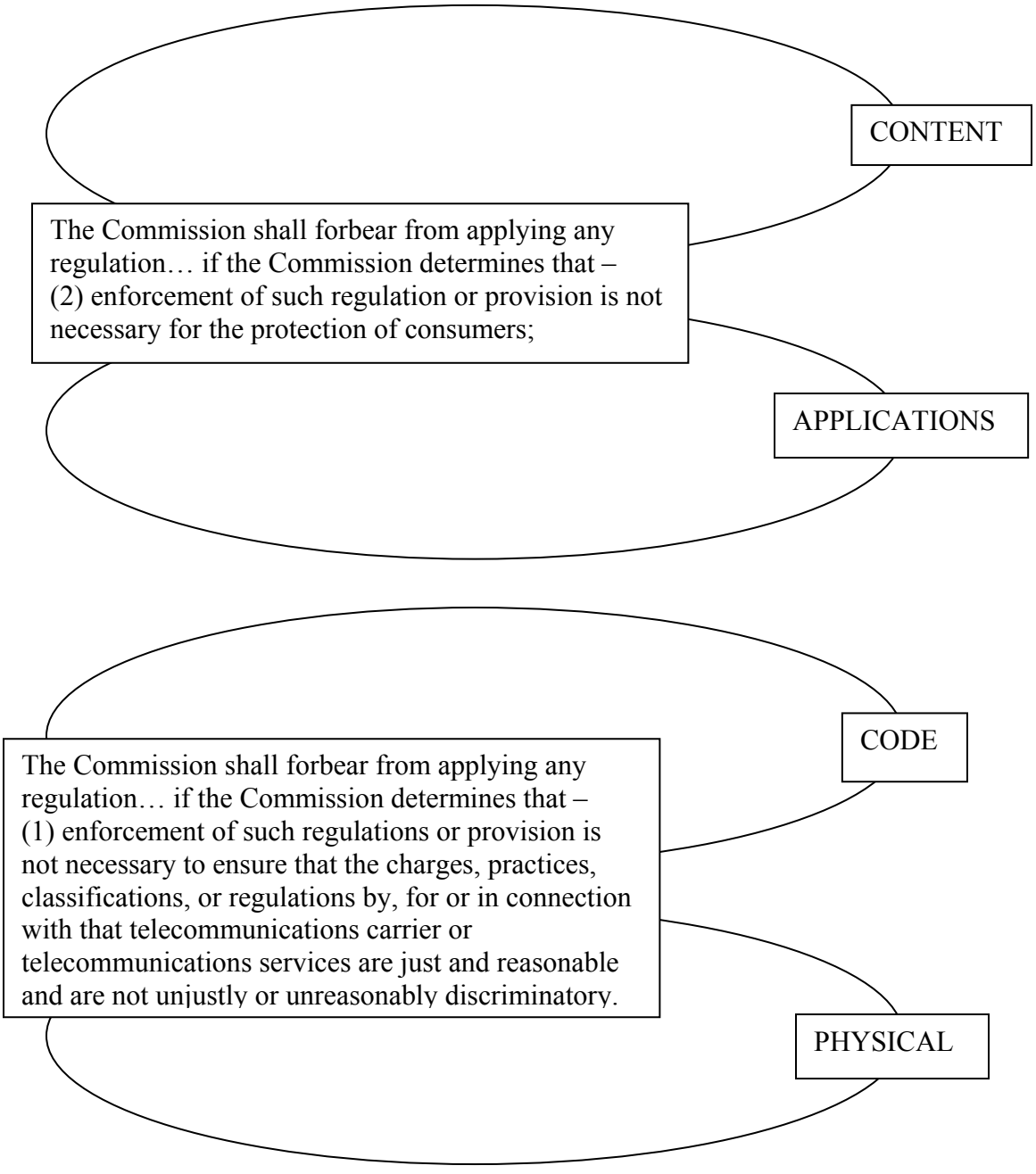

Exhibit 5: Indicia of the Type of Service: AT&T v. Pulver

Telecommunication Service					Information Service
			Technical & Economic Traits		
			Content Layer		
AT&T	←	Yes	End user to end user	No →	Pulver (a)[43]
AT&T, Pulver (limited)[44]	←	Yes	Substitutability (voice)	No	
			Applications Layer		
AT&T, Pulver	←	Yes	Functionality	No	
AT&T, Pulver	←	Yes	Real-time, 2-Way	No	
			Code Layer		
AT&T	←	Yes	Use of NANP	No →	Pulver
AT&T	←	No	"Net change" in form	Yes →	Pulver (a)
			Physical Layer		
AT&T	←	Yes	For a fee to the public	No →	Pulver
AT&T	←	Yes	Use of PSTN	No →	Pulver
AT&T	←	No	Traverses the Internet	Yes →	Pulver
AT&T	←	Yes	Traditional CPE	No →	Pulver
AT&T	←	Yes	(Back Power)	No →	Pulver

[43] Pulver is defined as a directory service in which end-users communicated with the Internet Service Provider, not another end-user. End-user to end-user communications is established in a separate transmission that relies on a peer-to-peer relationship.

[44] Service is limited to peers only and is not available for the general public.

Exhibit 6: Indicia of the Type of Service: Vonage

(Arrows in both directions indicate uncertainty mixed results)

Telecommunication Service					Information Service
			Technical & Economic Traits		
			Content Layer		
Vonage	←	Yes	End user to end-user	No	
Vonage	←	Yes	Substitutability (voice)	No	
			Applications Layer		
Vonage	←	Yes	Functionality	No	
Vonage	←	Yes	Real-time, 2-Way	No	
			Code Layer		
Vonage	←	Yes	Use of NANP	No	
Vonage	←	No	"Net change" in form	Yes →	Vonage[45]
			Physical Layer		
Vonage	←	Yes	For a fee to the public	No	
Vonage	←	Yes	Use of PSTN	No	
		No	Traverses the Internet	Yes →	Vonage
Vonage	←	Yes	Traditional CPE	No →	Vonage[46]
	←	Yes	(Back Power)	No →	Vonage (c)[47]

[45] This analysis turns on where one assumes the initial form of the transmission is established.
[46] The CPE contains equipment in addition to a traditional handset.
[47] The question of back-up power may depend on the configuration of high speed Internet service.

Exhibit 7: Public Policy Affecting VOIP as a Telecommunications Service,Cooperative Federalism Implemented as Federal Primacy, but not Exclusivity

Issues	Federal Action	State Action
	Compensation	
Intercarrier Compensation	Federal reform pending	Held in abeyance pending federal action
USF Contribution	Federal reform pending	Held in abeyance pending federal Action
Social		
E-911 Compliance	Resolve technical issues	Compliance only, held in abeyance pending federal action
Disability Access	Resolve technical issues	
	Consumer Protection	
Marketing	Federal truth in billing Antislamming, etc. enforced	State information disclosure, etc. enforced
Quality of Service		State implementation
Privacy	CPNI enforced	